Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/777,897	TANIGUCHI, NOBUTAKA
	Examiner	Art Unit
	Linh M. Nguyen	2816

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>12 October 2005</u>.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-8</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) <u>3,4 and 6-8</u> is/are allowed.

6)☒ Claim(s) <u>1,2 and 5</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>04 January 2005</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

    1.☒ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

This is a reply to Applicant's amendment filed on 10/12/2005. By virtue of this

amendment, claims 1-8 are pending in the instant application.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
> sale in this country, more than one year prior to the date of application for patent in the United States.

2.   Claims 1-2 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Applicant

Admitted Prior Art (AAPA) (Figs. 1 and 3).

With respect to claim 1, AAPA, Figs. 1 and 3, discloses a delay time adjusting circuit

with a corresponding method of adjusting a delay time of an input signal [Cin] so that a phase of

the input signal and a phase of an output signal [Cout] match each other, the method comprises

the steps of a) comparing [8] phases of the output signal and the input signal with each other, and

b) increasing [10, 3] the delay time whenever a phase difference detected in the step of

comparing indicates that the output signal is ahead of or behind the input signal.

With respect to claim 2, AAPA, Fig. 1, discloses that the method further comprises a step

of producing the output signal by delaying the input signal by a DLL circuit [3].

With respect to claim 5, AAPA, Figs. 1 and 3, discloses a delay time adjusting circuit for

adjusting a delay time of an input signal [Cin] so that a phase of the input signal and a phase of

an output signal [Cout] match each other between phases based on a comparison of the input

signal and the output signal, the circuit comprising a) detecting circuit [8] for detecting a phase

difference between the phase of the input signal and the phase of the output signal; and b)

delaying circuit [3] for increasing a delay time of the phase of the output signal when starting the delay time adjustment so that the delay time is set to a value at which the phase difference becomes N periods, where N is an integer other than zero and varies in accordance with the phase difference detected at a time of starting the delay time adjustment.

Allowable Subject Matter

3.   Claims 3-4 and 6-8 are allowed.

4.   The following is a statement of reasons for the indication of allowable subject matter:

The closest prior art on record does not show or fairly suggest:

a) A delay time adjusting method including a step of adjusting a delay time of the input first periodic signal so that a phase of the input first periodic signal and a phase of the output second periodic signal match within a predetermined tolerance, in combination with the remaining claimed limitations, as called for in claim 3;

b) A delay time adjusting method including a second step of increasing the delay time to adjust a phase of an output second periodic signal so that, when the phase of a predetermined rising edge is judged to be behind the phase of the first rising edge in the first step, the phase of the predetermined rising edge and a phase of a second rising edge of the input first periodic signal match each other, the second rising edge being one period behind the first rising edge, in combination with the remaining claimed limitations, as called for in claim 4;

c) A delay time adjusting circuit for adjusting a delay time of an input periodic signal including a delaying circuit for adjusting said delay time so that, when the phase of a predetermined rising edge of an output second periodic signal is judged to be behind the phase of the predetermined rising edge of the input first periodic signal by a judging means, the

predetermined rising edge of the output second periodic signal matches a rising edge of the input

first periodic signal, a phase of the rising edge being behind and nearest to the phase of the

predetermined rising edge of the output second periodic signal, in combination with the

remaining claimed limitations, as called for in claim 6; and

     d) A delay time adjusting circuit for adjusting a delay time of an input first periodic

signal including an adjusting circuit for controlling a delaying circuit so that, when the phase of

a predetermined rising edge is judged to be behind the phase of a first rising edge by a phase-

detecting circuit, the delaying circuit delays the phase of an output second periodic signal until

the phase of the predetermined rising edge and a phase of a second rising edge of an input first

periodic signal match each other, the second rising edge being one period behind the first rising

edge, in combination with the remaining claimed limitations, as called for in claim 7.

Remarks

5.   Applicant's arguments filed 05/18/2005 have been fully considered but they are not

persuasive.

     With respect to the Applicant's argument regarding claim 1, at page 8, last paragraph

bridging page 9, "*the AAPA fails to show that the delay time is increased in **both** the case where*

*the output signal is ahead of the in put signal **and** the case where the output signal is behind the*

input signal". In response to applicant's argument that the references fail to show certain features

of applicant's invention, it is noted that the features upon which applicant relies, the limitation

recitation "**both**" is not recited in the rejected claim(s). Although the claims are interpreted in

light of the specification, limitations from the specification are not read into the claims. See *In*

re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

With respect to the Applicant's argument regarding claim 5, at page 8, third paragraph, the examiner disagrees with the Applicant's statement *"AAPA fails to disclose ... "a delaying circuit for increasing a delay time of said phase of said output signal, when starting the delay time adjustment, so that the delay time is set to a value at which said phase difference becomes N periods, where N... ".* The delay time of the adjustment could be at any given number of periods in order to produce the matching and locking of the phases of the delay clock signal [dclk] and the target clock signal [tclk], which encompasses N periods when the detected phase difference is N periods.

Consequently, claims 1, 2 and 5 remain rejected as set forth in the office action.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh M. Nguyen whose telephone number is (571) 272-1749. The examiner can normally be reached on Alternate Mon, Tuesday - Friday from 7:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LMN

LINH MY NGUYEN
PRIMARY EXAMINER